BRAIN RESEARCH

VOL. 655 NOS. 1/2 **CONTENTS** **29 AUGUST 1994**

Cited in Biological Abstracts (BIOSIS) – Chem. Abstracts – Index Medicus (MEDLINE) – Current Contents (Life Sci.) – Excerpta Medica (EMBASE) – Psychological Abstracts (PsycINFO) – Pascal et Francis (INIST-CNRS) – RIS (Reference Update) – Current Awareness in Biological Science (CABS)

Announcement from the Publisher v

Guidelines for the Submission of Manuscripts vii

Research Reports

The cat pudendal nerve: afferent fibers responding to mechanical stimulation of the perineal skin, the vagina or the uterine cervix
R. Cueva-Rolón, E.J. Muñoz-Martínez, R. Delgado-Lezama and J.G. Raya (México) 1

Investigations of neurotoxicity and neuroprotection within the nucleus basalis of the rat
G.L. Wenk, W. Danysz and S.L. Mobley (USA, Germany) 7

NGF suppression of weight gain in adult female rats correlates with decreased hypothalamic cholecystokinin levels
P.A. Lapchak and D.M. Araujo (USA) 12

Pituitary adenylate cyclase-activating polypeptide (PACAP) increases prolactin release and tuberoinfundibular dopaminergic neuronal activity
L.A. Arbogast and J.L. Voogt (USA) 17

Chronic nicotine treatment counteracts dopamine D_2 receptor upregulation induced by a partial meso-diencephalic hemitransection in the rat
A.M. Janson, P.B. Hedlund, K. Fuxe and G. Von Euler (Sweden) 25

Chronic epileptogenicity following focal status epilepticus
Y. Shirasaka and C.G. Wasterlain (USA) 33

Cardiovascular and single unit responses elicited by stimulation of the islands of Calleja and by changes in arterial pressure
F.R. Calaresu, J. Zhang, V.C. Chitravanshi and D.J. McKitrick (Canada) 45

Prostacyclin enhances the evoked-release of substance P and calcitonin gene-related peptide from rat sensory neurons
C.M. Hingtgen and M.R. Vasko (USA) 51

Dopamine-induced protection of striatal neurons against kainate receptor-mediated glutamate cytotoxicity in vitro
T. Amano, H. Ujihara, H. Matsubayashi, M. Sasa, T. Yokota, Y. Tamura and A. Akaike (Japan) 61

Expression of protein phosphatases (PP-1, PP-2A, PP-2B and PTP-1B) and protein kinases (MAP kinase and $P34^{cdc2}$) in the hippocampus of patients with Alzheimer disease and normal aged individuals
J.-J. Pei, E. Sersen, K. Iqbal and I. Grundke-Iqbal (USA) 70

Glucose attenuates a morphine-induced decrease in hippocampal acetylcholine output: an in vivo microdialysis study in rats
M.E. Ragozzino, G.L. Wenk and P.E. Gold (USA) 77

Bilateral changes in striatal dopamine metabolism after unilateral intracarotid and intrastriatal administration of apomorphine
J.F. Hyde, C. VanderWende, P.L. Wood, H.F. Kim and T.P. Jerussi (USA) 83

Kynurenate is neuroprotective following experimental brain injury in the rat
R.R. Hicks, D.H. Smith, T.A. Gennarelli and T. McIntosh (USA) 91

The monoclonal antibody Alz-50, used to reveal cytoskeletal changes in Alzheimer's disease, also reacts with a large subpopulation of somatostatin neurons in the normal human hypothalamus and adjoining areas
J.A.P. Van de Nes, A.A. Sluiter, C.W. Pool, W. Kamphorst, R. Ravid and D.F. Swaab (Netherlands) 97

Swelling-induced K^+ influx in cultured primary astrocytes
A.A. Mongin, S.L. Aksentsev, S.N. Orlov, N.G. Slepko, M.V. Kozlova, G.V. Maximov and S.V. Konev (Belarus, Russia) 110

Alterations of local cerebral glucose utilization in lean and obese *fa / fa* rats after acute adrenalectomy
P. Doyle, F. Rohner-Jeanrenaud and B. Jeanrenaud (Switzerland) 115

Structural studies of condensation products of biogenic amines as inhibitors of tryptophan hydroxylase
K. Matsubara, M. Ota, T. Takahashi, W. Maruyama and M. Naoi (Japan) 121

GLUT2 expression in the rat retina: localization at the apical ends of Müller cells
T. Watanabe, Y. Mio, F.B. Hoshino, S. Nagamatsu, K. Hirosawa and K. Nakahara (Japan) 128

High expression of noradrenaline, choline acetyltransferase and glial fibrillary acidic protein in the epileptic focus consecutive to GABA withdrawal. An immunocytochemical study
S. Araneda, C. Silva-Barrat, C. Menini and R. Naquet (France) 135

Phorbol ester stimulates acetylcholine synthesis in cultured endothelial cells isolated from porcine cerebral microvessels
C. Ikeda, I. Morita, A. Mori, K. Fujimoto, T. Suzuki, K. Kawashima and S.-i. Murota (Japan) 147

Inhibitor of antagonist binding to the muscarinic receptor is elevated in Alzheimer's brain
W.H. Frey II, C.R. Emory, M.E. Wiebenga, S. Saxena, D. Cardelli, T.A. Ala and G.D. Tollefson (USA) 153

(contents continued on p. 282)

0006-8993(19940829)655:1/2;1-C

BRAIN RESEARCH

VOL. 655 NOS. 1/2 **CONTENTS** **29 AUGUST 1994**

Cited in Biological Abstracts (BIOSIS) – Chem. Abstracts – Index Medicus (MEDLINE) – Current Contents (Life Sci.) – Excerpta Medica (EMBASE) – Psychological Abstracts (PsycINFO) – Pascal et Francis (INIST-CNRS) – RIS (Reference Update) – Current Awareness in Biological Science (CABS)

Announcement from the Publisher v

Guidelines for the Submission of Manuscripts vii

Research Reports

The cat pudendal nerve: afferent fibers responding to mechanical stimulation of the perineal skin, the vagina or the uterine cervix
R. Cueva-Rolón, E.J. Muñoz-Martínez, R. Delgado-Lezama and J.G. Raya (México) 1

Investigations of neurotoxicity and neuroprotection within the nucleus basalis of the rat
G.L. Wenk, W. Danysz and S.L. Mobley (USA, Germany) 7

NGF suppression of weight gain in adult female rats correlates with decreased hypothalamic cholecystokinin levels
P.A. Lapchak and D.M. Araujo (USA) 12

Pituitary adenylate cyclase-activating polypeptide (PACAP) increases prolactin release and tuberoinfundibular dopaminergic neuronal activity
L.A. Arbogast and J.L. Voogt (USA) 17

Chronic nicotine treatment counteracts dopamine D_2 receptor upregulation induced by a partial meso-diencephalic hemitransection in the rat
A.M. Janson, P.B. Hedlund, K. Fuxe and G. Von Euler (Sweden) 25

Chronic epileptogenicity following focal status epilepticus
Y. Shirasaka and C.G. Wasterlain (USA) 33

Cardiovascular and single unit responses elicited by stimulation of the islands of Calleja and by changes in arterial pressure
F.R. Calaresu, J. Zhang, V.C. Chitravanshi and D.J. McKitrick (Canada) 45

Prostacyclin enhances the evoked-release of substance P and calcitonin gene-related peptide from rat sensory neurons
C.M. Hingtgen and M.R. Vasko (USA) 51

Dopamine-induced protection of striatal neurons against kainate receptor-mediated glutamate cytotoxicity in vitro
T. Amano, H. Ujihara, H. Matsubayashi, M. Sasa, T. Yokota, Y. Tamura and A. Akaike (Japan) 61

Expression of protein phosphatases (PP-1, PP-2A, PP-2B and PTP-1B) and protein kinases (MAP kinase and $P34^{cdc2}$) in the hippocampus of patients with Alzheimer disease and normal aged individuals
J.-J. Pei, E. Sersen, K. Iqbal and I. Grundke-Iqbal (USA) 70

Glucose attenuates a morphine-induced decrease in hippocampal acetylcholine output: an in vivo microdialysis study in rats
M.E. Ragozzino, G.L. Wenk and P.E. Gold (USA) 77

Bilateral changes in striatal dopamine metabolism after unilateral intracarotid and intrastriatal administration of apomorphine
J.F. Hyde, C. VanderWende, P.L. Wood, H.F. Kim and T.P. Jerussi (USA) 83

Kynurenate is neuroprotective following experimental brain injury in the rat
R.R. Hicks, D.H. Smith, T.A. Gennarelli and T. McIntosh (USA) 91

The monoclonal antibody Alz-50, used to reveal cytoskeletal changes in Alzheimer's disease, also reacts with a large subpopulation of somatostatin neurons in the normal human hypothalamus and adjoining areas
J.A.P. Van de Nes, A.A. Sluiter, C.W. Pool, W. Kamphorst, R. Ravid and D.F. Swaab (Netherlands) 97

Swelling-induced K^+ influx in cultured primary astrocytes
A.A. Mongin, S.L. Aksentsev, S.N. Orlov, N.G. Slepko, M.V. Kozlova, G.V. Maximov and S.V. Konev (Belarus, Russia) 110

Alterations of local cerebral glucose utilization in lean and obese *fa / fa* rats after acute adrenalectomy
P. Doyle, F. Rohner-Jeanrenaud and B. Jeanrenaud (Switzerland) 115

Structural studies of condensation products of biogenic amines as inhibitors of tryptophan hydroxylase
K. Matsubara, M. Ota, T. Takahashi, W. Maruyama and M. Naoi (Japan) 121

GLUT2 expression in the rat retina: localization at the apical ends of Müller cells
T. Watanabe, Y. Mio, F.B. Hoshino, S. Nagamatsu, K. Hirosawa and K. Nakahara (Japan) 128

High expression of noradrenaline, choline acetyltransferase and glial fibrillary acidic protein in the epileptic focus consecutive to GABA withdrawal. An immunocytochemical study
S. Araneda, C. Silva-Barrat, C. Menini and R. Naquet (France) 135

Phorbol ester stimulates acetylcholine synthesis in cultured endothelial cells isolated from porcine cerebral microvessels
C. Ikeda, I. Morita, A. Mori, K. Fujimoto, T. Suzuki, K. Kawashima and S.-i. Murota (Japan) 147

Inhibitor of antagonist binding to the muscarinic receptor is elevated in Alzheimer's brain
W.H. Frey II, C.R. Emory, M.E. Wiebenga, S. Saxena, D. Cardelli, T.A. Ala and G.D. Tollefson (USA) 153

(contents continued on p. 282)

0006-8993(19940829)655:1/2;1-C

(contents continued)

α-Bungarotoxin blocks the nicotinic receptor mediated increase in cell number in a neuroendocrine cell line
M. Quik, J. Chan and J. Patrick (Canada, USA) 161

Host resets phase of grafted suprachiasmatic nucleus: a 2-DG study of time course of entrainment
J. Servière, G. Gendrot, J. LeSauter and R. Silver (France, USA) 168

SCG10 mRNA localization in the hippocampus: comparison with other mRNAs encoding neuronal growth-associated proteins (nGAPs)
T. Himi, T. Okazaki, Y. Sugiura and N. Mori (USA) 177

Non-NMDA receptors in motor neuron disease (MND): a quantitative autoradiographic study in spinal cord and motor cortex using [^{3}H]CNQX and [^{3}H]kainate
P.J. Shaw, R.M. Chinnery and P.G. Ince (UK) 186

[^{3}H]D-Aspartate binding sites in the normal human spinal cord and changes in motor neuron disease: a quantitative autoradiographic study
P.J. Shaw, R.M. Chinnery and P.G. Ince (UK) 195

Features of targeted arm movement after unilateral excisions that included the supplementary motor area in humans
K.R. Bell, G.H. Traylor, M.E. Anderson, M.S. Berger and G.A. Ojemann (USA) 202

Effect of oxidative stress on the release of [^{3}H]GABA in cultured chick retina cells
P. Agostinho, C.B. Duarte, A.P. Carvalho and C.R. Oliveira (Portugal) 213

Growth conditions differentially modulate the vulnerability of developing cerebellar granule cells to excitatory amino acids
A. Resink, N. Hack, G.J. Boer and R. Balázs (Netherlands) 222

Short Communications

6-OHDA-induced lesion of the nigrostriatal dopaminergic neurons potentiates the inhibitory effect of 7-OHDPAT, a selective D_3 agonist, on acetylcholine release during striatal microdialysis in conscious rats
K. Sato, H. Ueda, F. Okumura and Y. Misu (Japan) 233

Visualizing vanilloid (capsaicin) receptors in pig spinal cord by [^{3}H]resiniferatoxin autoradiography
A. Szallasi, S. Nilsson, T. Hökfelt and J.M. Lundberg (Sweden) 237

Parvalbumin, calretinin and carbonic anhydrase in the trigeminal and spinal primary neurons of the rat
H. Ichikawa, T. Deguchi, T. Nakago, D.M. Jacobowitz and T. Sugimoto (Japan, USA) 241

CNTF potentiates peripheral nerve regeneration
Z. Sahenk, J. Seharaseyon and J.R. Mendell (USA) 246

Glucocorticoids mediate the stress-induced extracellular accumulation of glutamate
B. Moghaddam, M.L. Bolinao, B. Stein-Behrens and R. Sapolsky (USA) 251

Proliferative effects of humoral factors derived from neuroblastoma cells on cultured astrocytes
M. Ohashi, S. Amano, F. Hazama and J. Handa (Japan) 255

CuZn-superoxide dismutase (CuZnSOD) transgenic mice show resistance to the lethal effects of methylenedioxyamphetamine (MDA) and of methylenedioxymethamphetamine (MDMA)
J.L. Cadet, B. Ladenheim, I. Baum, E. Carlson and C. Epstein (USA) 259

Thyrotropin-releasing hormone reverses the supersensitively depressed monosynaptic transmission by serotonin in 5,7-dihydroxytryptamine-treated neonatal rats in vitro
S.B. Deshpande and J.E. Warnick (USA) 263

Mutation of low affinity nerve growth factor receptor gene in spontaneously hypertensive and stroke-prone spontaneously hypertensive rats: one of the promising candidate genes for hypertension
K. Nemoto, H. Kageyama, T. Hagiwara, F. Tashiro, T. Tomita, I. Tomita, T. Hano, I. Nishio and T. Ueyama (Japan) 267

Dopamine release in the rat cerebellum and hippocampus: a tissue 3-methoxytyramine study
S.J. Chrapusta, M.F. Egan, J.M. Masserano and R.J. Wyatt (USA) 271

Author Index 276

Erratum 279